

Date Created : 2007/04/25  
Date Issued On : 2007/05/07  
PCN# : Q2071702

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

This is to inform you that a design and/or process change will be made to the following product(s). This notification is for your information and concurrence.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

Updated process quality documentation, such as FMEAs and Control Plans, are available for viewing upon request.

If you have any questions concerning this change, please contact:

Technical Contact:

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Implementation of change:

Expected 1st Device Shipment Date: 2007/06/06

Earliest Year/Work Week of Changed Product: H3

Change Type Description: Die Revision

Description of Change (From): Die change

Description of Change (To): Four changes were made to the current production die with metal mask updates. Change 1: The receiver serial clock signal was delayed to better center on the serial data. Change 2: Internal serial interconnects were re-routed for better isolation from transient signals. Change 3: The serial standby burst source current, IODSTBY, was increased to improve noise immunity. The serial burst source current was increased from 130uA to 200uA typical. The master burst standby current, IBRST\_M, was increased from 1.1mA to 1.3mA typical. Change 4: ESD robustness was improved by adding a filter to ignore ESD transient events on the serial lines.

Reason for Change : Improve RF and ESD susceptibility.

Qual/REL Plan Numbers : Q20060318

This change was qualified by similarity in die size and power dissipation to the original reliability qualification data. The FIN324CGFX was qualified by similarity to the FIN24CGFX with results in F20050073. The FIN324CMLX was qualified by similarity to the FIN24CMLX with results in F20050228.

Qualification :

The products pass qualification. See attached reports F20050073 and F20050228.

**Results/Discussion**

Test: (High Temperature Storage Life)				
Lot	Device	168-HOURS	1000-HOURS	Failure Code
Q20060318AAHTSL	FIN668GFX	0/77		
Q20060318AAHTSL	FIN668GFX		0/77	
Q20060318ABHTSL	FIN668GFX	1/77		TEST ESCAPE
Q20060318ABHTSL	FIN668GFX		0/77	
Q20060318ACHTSL	FIN668GFX	0/77		
Q20060318ACHTSL	FIN668GFX		0/77	

  

Test: (Static Op Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20060318AASOPL1		0/77			
			0/77		
				0/77	
Q20060318ABSOP1		0/77			
			0/77		
				0/77	
Q20060318ACSOPL1		0/77			
			0/77		
				0/77	

  

Test: -65C, 150C (Temperature Cycle)				
Lot	Device	500-CYCLES	1000-CYCLES	Failure Code
Q20060318AATMCL1	FIN668GFX	0/77		
Q20060318AATMCL1	FIN668GFX		1/77	SMASHED BUMPS/PADS
Q20060318ABTMCL1	FIN668GFX	0/77		
Q20060318ABTMCL1	FIN668GFX		0/77	
Q20060318ACTMCL1	FIN668GFX	0/77		
Q20060318ACTMCL1	FIN668GFX		0/77	

  

Test: 110C (Highly Accelerated Stress Test)				
Lot	Device	264-HOURS	528-HOURS	Failure Code
Q20060318AAHAST2	FIN668GFX	0/45		
Q20060318AAHAST2	FIN668GFX		0/45	
Q20060318ABHAST2	FIN668GFX	0/45		
Q20060318ABHAST2	FIN668GFX		0/45	
Q20060318ACHAST2	FIN668GFX	0/45		
Q20060318ACHAST2	FIN668GFX		0/45	

  

Test: MSL(2), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)				
Lot	Device	Results	Failure Code	
Q20060318AAPCNL2A	FIN668GFX	0/209		
Q20060318ABPCNL2A	FIN668GFX	1/209	TEST ESCAPE	
Q20060318ACPCNL2A	FIN668GFX	1/209	Good Device	

Product Id Description : FIN324C 24-Bit Ultra-Low Power Serializer Deserializer Supporting Single and Dual Displays

Affected FSIDs :

FIN324CGFX	FIN324CMLX	
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